

**NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, DC 20594**

**HUMAN PERFORMANCE GROUP CHAIRMAN'S FACTUAL REPORT-
ADDENDUM 4**

**LOCATION & DATES
DCA01MM022**

A. ACCIDENT

Accident No.	DCA-01-MM-022
Vessels Involved:	USS Greenville, MV Ehime Maru
Location:	About 9 miles south of Oahu, Hawaii
Date:	February 9, 2001
Time:	1343 HST ¹

B. OPERATIONS/HUMAN PERFORMANCE GROUP

Tom Roth-Roffy, NTSB, Operations Group Chairman
Will Woody, NTSB, Human Performance Specialist
Barry Strauch, NTSB, Human Performance Specialist
Lt. Charlie Johnson, US Coast Guard
Lt. Commander Rick Santamauro, US Navy
Commander John Caccivio, US Navy
Capt. Tom Kyle, US Navy

C. Summary

On February 9, 2001, at 1343 local time, the USS Greenville, (SSN 772), a Los Angeles class submarine, collided with the Japanese Motor Vessel, Ehime Maru, about 9 miles south of Oahu, Hawaii. The Ehime Maru, engaged in teaching Japanese high school students the fishing trade, was traveling at 11 knots, on a course of 166°, en route to a fishing area. The Greenville was engaged in a distinguished visitor cruise, a Navy program that invites civilians to observe actual operations aboard its vessels. The Greenville struck the Ehime Maru as it completed an emergency surfacing maneuver from a depth of about 400 feet. The Ehime Maru was damaged and sank as a result of the collision. Thirty five people were onboard the Ehime Maru. The bodies of eight were found when the vessel was retrieved from the ocean floor. A ninth was missing and is presumed to have been killed in the accident. The Greenville was damaged but was able to return to Pearl Harbor under its own power. There were no injuries to any of the persons on board.

¹ All times are in Hawaiian Standard Time as read on a 24-hour clock, unless specifically noted.

D. Report

In March 2002, Safety Board investigators interviewed the Navy's Deputy Chief of Staff, Tactics and Training, of SUBPAC. He suggested several factors that affected the quality of the oversight of the Greenville. Because of the refitting of the vessel with the Seal delivery system, the Greenville's deployment cycle was extended "significantly." This led to a gap in the standard inspections to which the Greenville was subject. At the same time, SUBPAC changed its oversight practices. The regular 12-month tactical exam that submarine crews received had been changed to one that depended on the deployment cycle, and thus when the Greenville's deployment was rescheduled, the evaluations extended as well. Further, to increase efficiency, squadron level staffing was reduced, and changed, leading to a disruption in assignments and confusion among staff about their responsibilities and a "major perturbation" in the "oversight infrastructure." Additionally, the squadron was dealing with a vessel that had a series of problems and thus, required considerable attention. The Deputy of Staff told Safety Board investigators that had proper oversight of the Greenville been carried out, "I think we would have seen the harbingers of problems."

Since the accident, SUBPAC made changes to the nature of their squadron staffing and oversight. These included the following:

- The evaluation process was redesigned to ensure that vessel operations are thoroughly monitored and evaluated
- Commanding officer selection criteria were reevaluated
- Submarine crew training was revised to emphasize performance-based training
- Certification standards were developed and implemented for periscope operators
- Squadron staffing assignments were reevaluated and staffing was increased, with the standards for assignment to squadron deputy positions increased
- Submarines were to be given three separate evaluations at regular intervals, including two that the Commodore and SUBPAC staff performed. The Commodore was given the responsibility of addressing the findings of SUBPAC evaluations
- Executive officers, together with commanding officers, were to participate in prospective commanding officer training
- A common evaluation standard was developed for evaluating vessel performance, and
- A system was developed to track each vessel and monitor trends in incidents among each vessel.

Barry Strauch